

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of Application by )  
SES AMERICOM, INC. ) Call Sign KA288  
To Modify its Earth Station License to Perform )  
TT&C for ASTRA 3A at 86.85° W.L. )

**REQUEST FOR MODIFICATION**

By this application, SES Americom, Inc. (“SES Americom” or “SES”) respectfully seeks to modify its license for earth station KA288 to allow it to communicate with the ASTRA 3A spacecraft in order to provide Tracking, Telemetry and Command (“TT&C”) following relocation of the satellite from 176.85° W.L. to 86.85° W.L. (+/- 0.10° east/west stationkeeping). The satellite is expected to arrive at 86.85° W.L. on or about August 15, 2016.

SES Americom’s affiliate, SES ASTRA S.A. (“SES ASTRA”), holds an authorization from the Luxembourg Ministry of State, Office of Media and Communications<sup>1</sup> for the ASTRA 3A Ku-band spacecraft. SES ASTRA has requested that SES Americom assist with providing TT&C to support the planned relocation of ASTRA 3A to 86.85° W.L. Upon arrival at the nominal 87° W.L. orbital location, ASTRA 3A will join the SES-2 spacecraft and will operate in inclined orbit.

SES Americom’s license for KA288 permits the earth station to communicate with ASTRA 3A to perform TT&C using certain Ku-band frequencies at its current location, 176.85° W.L., and this modification request seeks authority to continue that service after the satellite relocates to 86.85° W.L. SES is not requesting U.S. market access or any other

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<sup>1</sup> Ministère d’État, Service des Médias et des Communications of the Grand Duchy of Luxembourg.

authorization from the Commission in relation to the non-U.S.-licensed ASTRA 3A spacecraft, and therefore is not providing full technical information about the ASTRA 3A satellite as part of this application.<sup>2</sup> Details regarding the ASTRA 3A TT&C operations, including link budgets and interference analysis, a basic technical description of the satellite's proposed operations, and an updated orbital debris mitigation statement for ASTRA 3A, were submitted in support of a request for Special Temporary Authority for KA288<sup>3</sup> and are incorporated by reference herein. As discussed below, those materials show that communications with ASTRA 3A will not adversely affect the operation of any adjacent satellites.

***Grant of this Modification Request Will Serve the Public Interest.*** Grant of this request is in the public interest. The requested TT&C authority will facilitate the safe operation of ASTRA 3A once it relocates to 86.85° W.L.

***No Harmful Interference to Other Spacecraft.*** Apart from SES-2, the nearest satellites to 86.85° W.L. with Ku-band operations are Intelsat's Galaxy 28 at 89.0° W.L. and the Ku-band payload of AMC-16 at 85.0° W.L., which is licensed to EchoStar. Attachment 1 to the KA288 STA Request demonstrates that the proposed operations comply with the Commission's two-degree spacing requirements.

***Waiver Requests.*** SES requests limited waivers of the Commission's requirements in connection with the instant request. Grant of these waivers is consistent with Commission policy:

The Commission may waive a rule for good cause shown. Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would

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<sup>2</sup> See Waiver Requests, *infra*.

<sup>3</sup> See Submission ID No. IB2016001196 (filed May 27, 2016) (the "KA288 STA Request"), Attachments 1 and 2.

better serve the public interest than would strict adherence to the general rule. Generally, the Commission may grant a waiver of its rules in a particular case if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.<sup>4</sup>

Sections 25.137 and 25.114. SES requests a waiver of Section 25.137 and the other Commission rules cross-referenced therein. SES seeks a modification of its authority in connection with TT&C for ASTRA 3A, a foreign-licensed spacecraft. Section 25.137 requires that applicants proposing to use U.S.-licensed earth stations to communicate with foreign-licensed spacecraft demonstrate that the Commission's policies for U.S. market access are satisfied. Section 25.137 also incorporates by reference other requirements for Commission-licensed space stations, including the obligation to file detailed technical information as specified in Section 25.114.

By its terms, Section 25.137 is inapplicable to the instant request. The rule's requirements come into play only when a non-U.S.-licensed satellite is to be used to "serve the United States."<sup>5</sup> Here, the KA288 earth station will be used solely for TT&C, not for commercial operations. Thus, SES is not seeking authority to communicate with ASTRA 3A for purposes of providing U.S. service within the meaning of Section 25.137.

To the extent the Commission disagrees, SES requests a waiver of the market access and other requirements imposed in Section 25.137. Grant of a waiver will not undermine the objectives of these requirements. The market access test described in the rule is intended to ensure that U.S.-licensed systems have "effective competitive opportunities."<sup>6</sup> Because SES

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<sup>4</sup> *PanAmSat Licensee Corp.*, 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

<sup>5</sup> 47 C.F.R. § 25.137(a).

<sup>6</sup> *Id.*

Americom is not seeking authority to provide commercial services in the United States, the requested STA does not raise any concerns about competitive equality.<sup>7</sup>

Strict adherence with Section 25.114's requirements for detailed technical information is also unnecessary and would be unduly burdensome. SES Americom is proposing to use KA288 only for the limited purpose of performing TT&C for the satellite once it arrives at 86.85° W.L., and the relevant technical characteristics of those transmissions are on file in the KA288 STA Request. The transmissions to the spacecraft will be conducted on a non-harmful interference basis. In these circumstances, no valid purpose would be served by requiring a complete description of the ASTRA 3A spacecraft.

SES Americom's request is consistent with Commission precedent. In similar cases in which limited communications by U.S. earth stations with a foreign-licensed satellite were proposed, the Commission has granted operational authority without requiring a market access showing under Section 25.137 or full technical data as required by Section 25.114.<sup>8</sup>

Section 2.106 Footnote NG52. To the extent that reception of telemetry at 11450.25 MHz and 11699.50 MHz constitutes a domestic (*i.e.*, non-international) service, SES Americom respectfully requests a limited waiver of the international-service-only restriction.<sup>9</sup>

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<sup>7</sup> In any event, the ASTRA 3A spacecraft at 86.85° W.L. will be operating under the authority of Luxembourg, a WTO member country, and therefore is exempt from the requirement to make a showing of effective competitive opportunities. 47 C.F.R. § 25.137(a)(2).

<sup>8</sup> *See, e.g.*, SES Americom, Inc., File No. SES-MFS-20131108-00951 (Call Sign KA288), granted Mar. 19, 2014; Hawaii Pacific Teleport, L.P., File No. SES-MFS-20131030-00913 (Call Sign E030115), granted Apr. 16, 2014 (granting authority for earth station to provide TT&C services to ASTRA 3A operating at 176.85° W.L.); PanAmSat Licensee Corp., File Nos. SES-STA-20090922-01211 (Call Sign E4132) & SES-STA-20090922-01212 (Call Sign E040125), both grant-stamped Oct. 16, 2009 (granting authority for earth stations to communicate with foreign-licensed NSS-12 spacecraft for purposes of providing launch and early operations services).

<sup>9</sup> 47 U.S.C. § 2.106 Footnote NG52.

Such a waiver is warranted in the circumstances for the limited purpose of TT&C. As the Commission has recognized, TT&C operations generally require uplink and downlink capability from the same earth station. For this reason, the Commission has previously granted waivers of the international service restriction to enable TT&C to be performed in the U.S. using the extended Ku-band frequencies.<sup>10</sup>

Grant of the requested waiver would not undermine the purpose of the restriction, which is to ensure that earth station deployments in the extended Ku-band do not negatively impact the deployment of fixed service (“FS”) in the same band or cause interference to such operations. The telemetry downlink signals from ASTRA 3A in the extended Ku-band are narrow in bandwidth, and will comply with the power flux density limits in the Commission’s rules and, thus, will not interfere with FS station operations. Moreover, only a small number of U.S. earth stations will be used to perform TT&C in the extended Ku-band.<sup>11</sup> Once ASTRA 3A is on-station at 86.85° W.L., the TT&C will be performed by two U.S. earth stations: SES Americom’s KA288 earth station, and its E050287 earth station in Woodbine, Maryland. As a result, there will be no significant restrictions placed on the deployment of FS in this band.

Section 25.210(j). The ASTRA 3A satellite is authorized by the Luxembourg Government to operate at 86.85° W.L. within a +/- 0.10° east/west stationkeeping box. To the extent necessary, SES respectfully requests a waiver of Section 25.210(j) of the Commission’s

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<sup>10</sup> See, e.g., *EchoStar KuX Corporation*, 20 FCC Rcd 919 (Int’l Bur. 2004) (“*EchoStar 83W Order*”); *EchoStar Satellite LLC*, 20 FCC Rcd 930 (Int’l Bur. 2004) (“*EchoStar109W Order*”); *EchoStar KuX Corporation*, 20 FCC Rcd 942 (2004) (“*EchoStar 121W Order*”). These decisions granted waivers of the international only restriction in Footnote NG104, which has been replaced by Footnote NG52.

<sup>11</sup> See *EchoStar 83W Order*, at ¶ 16 (“The Commission has waived this [international only] requirement where the number of potential earth stations in a particular service is inherently small.”); *EchoStar 109W Order*, at ¶ 16 (same); *EchoStar 121W Order*, at ¶ 17 (same).

rules, which requires geostationary space stations to be operated within a +/- 0.05° east/west stationkeeping box. The Commission has previously waived this rule based on a finding that allowing an increased stationkeeping volume would “not adversely affect the operations of other spacecraft, and would conserve fuel for future operations.”<sup>12</sup>

The facts here fit squarely within this precedent. Allowing ASTRA 3A to be maintained within an increased stationkeeping volume will not harm other operators. ASTRA 3A’s stationkeeping volume will not overlap with that of any other satellites. In addition, allowing ASTRA 3A to be flown at 86.85° W.L. in an expanded east-west stationkeeping volume of +/-0.1 degrees will result in fuel savings for the spacecraft. This will prolong the time during which ASTRA 3A will be available to provide service. Under these circumstances, grant of any necessary waiver of Section 25.210(j) will serve the public interest.

SES hereby certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

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<sup>12</sup> See File Nos. SAT-MOD-20080124-00030 & SAT-AMD-20080311-00070, grant-stamped May 19, 2008, Attachment at ¶ 1.

For the foregoing reasons, SES respectfully seeks to modify its KA288 earth station license to communicate with ASTRA 3A in order to provide TT&C once it is on station, as described herein. Grant of the requested authority will promote safe operation of the satellite after its relocation.

Respectfully submitted,

SES AMERICOM, INC.

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